

REMARKS

The (supplemental) Final Office Action continues to confuse the cited fixed, static circuit in the Kuroda ('643) reference with Applicant's claim limitations directed to a dynamically configurable circuit that uses decoupling cells to maintain connection distances as the different circuit nodes are used under different operational conditions. This confusion is further apparent in the objections to claims 15-17, which further call out related claim limitations directed to selective coupling (*i.e.*, to connect one or more portions of a circuit network to a circuit node), as described in detail in the specification. The Office Action also fails to address Applicant's traversals, in that the totality of the "Response to Applicant Remarks" is limited to a single sentence "[t]he prior art of record discloses all the elements recited in the claims as detailed above" that does not address any of Applicant's traversals. This failure to address Applicant's traversals is contrary to M.P.E.P. 707.07(f) and relevant law. In the following, Applicant has again attempted to highlight the lack of correspondence in the cited '643 reference, and submits that all rejections are improper and must be removed.

The Final Office Action dated July 10, 2008 indicated that claims 15-17 stand objected to, and that claims 1-17 stand rejected under Section 102(b) over Kuroda (U.S. Patent Pub. 2001/0039643). Applicant traverses the objection and rejections, and further does not acquiesce to any averments made in the Office Action, unless Applicant expressly indicates otherwise.

Applicant respectfully traverses the claim objections because the claim limitations that the rejections are based upon are both clear and supported in the specification. For example, the decoupling cells may selectively connect one or more of different conductors in the network of conductors to circuit elements by opening and closing to modify the distance between a particular circuit element and either of power or ground pads. Support for these limitations is throughout the specification, with example approaches shown in FIG. 3 and described at paragraphs 0020-0023. Referring to FIG. 3, various decoupling cells, each labeled as 65, selectively connect (*i.e.*, open or close) to control the distance between a circuit element such as noted point X, Y and power and ground pads. In this regard, Applicant submits that the claim objections are improper.

The Section 102(b) rejections are improper because the cited (fixed) circuits of the '643 reference are not a "network of conductors" as claimed, and do not operate or couple/decouple to maintain a distance that is constant for each of a plurality of different circuit elements. Furthermore, the Office Action's assertion that the "decoupling capacitors" in FIG. 6 somehow supply power to circuit elements that are N regions and P regions where these N and P regions make up the cited capacitors is untenable; Applicant submits that the capacitors cannot and do not supply power to themselves. In this regard, the Office Action's continued assertions are confusing and inconsistent with the cited reference. There are no "decoupling cells" that provide power to other circuit elements because the cited capacitors are the circuit elements themselves, and further because the connectors are fixed, or static, relative to these capacitors.

Referring specifically to FIG. 4, the various N and P regions that form devices, such as capacitors shown in FIG. 6, are circuit elements coupled directly between power and ground (VDD and VSS). The connectors, 30d, 30e, 31d and 31e couple these capacitors to VDD and VSS. In this regard, there are no "decoupling cells" that couple power to other circuits. Moreover, there is no "network of conductors" as each capacitor is connected directly to either VDD or VSS using a single conductor (*e.g.*, conductors 30d and 30e connect to capacitor 30), and as such the circuits connecting the non-logic cells (transistors 30 and 31) to VDD and VSS are fixed. The N and P regions as cited in the Office Action are part of the capacitors. In addition, the distances between VDD and VSS for the various N and P regions does not appear to be consistent among the different N and P regions (*see, e.g.*, P⁺ regions 30a and 30b, respectively having different combined distances between VDD and VSS). In this regard, not only has the Office Action failed to show decoupling cells as claimed, the cited "circuit elements" are not maintained at constant distance by any decoupling cells (*i.e.*, the coupling is single, static coupling). The '643 reference thus fails to anticipate corresponding limitations of independent claim 1 as well as the claims that depend therefrom, and other relevant limitations of independent claim 14 and claims that depend therefrom.

Specifically regarding the limitations in claim 2, the asserted transistors and power connections in the '643 reference are fixed such that there is no change in the distance of any given circuit element and thus no corresponding increase or decrease in distance. The

Office Action's assertion at page 3 that "as the distance of any given circuit element from the power pad increases, the distances from the ground pad decreases" in FIG. 4 is clearly erroneous. As discussed above, the asserted circuit elements in FIG. 4 are connected by a single connector to each of VDD and VSS and, therefore, cannot increase or decrease. As shown in the equivalent circuit of FIG. 6(B) and as related to FIG. 4 in the '643 reference, each of the connections to VDD and VSS are fixed and do not present any power routing options for either of the transistors (30 and 31 in FIG. 6A). There appears to be no manner in which to maintain a consistent combined distance (*e.g.*, increase one distance and decrease a different distance) between respective pads and a circuit element. In this context, the '643 reference does not operate to change circuit connections to maintain a circuit length. Regarding claims 3-10 and 11-17, the '643 reference fails to provide correspondence to various limitations in view of the above and/or otherwise as asserted in the previously-filed Office Action Responses of record, which are incorporated fully herein.

Further regarding independent claim 14 and as applicable to claims 15-17 that depend therefrom, the asserted "decoupling cells" in the '643 reference do not connect a plurality of circuit elements to power/ground pads via conductors to maintain a constant combined distance. As discussed above, the cited transistors 30 and 31 are the only circuit elements between VDD and VSS and thus cannot connect any other circuit element. Moreover, these cells cannot couple power to themselves (*i.e.*, to the N and P regions that form the cited capacitors). Specifically regarding dependent claim 15 and as is consistent with the above, the cited transistors in the '643 reference do not form a network for "selectively connecting the conductors to the circuit element to decrease the distance between the circuit element and one of the power pad and the ground pad." Furthermore, the '643 reference does not disclose such selective connectivity in a manner "that is complementary to an increased distance between the circuit element and the other one of the power pad and the ground pad." The '643 reference also fails to disclose similar limitations in claim 16, which similarly involve a change in circuit distance that is complementary to a decreased distance. Regarding claim 17 and as is consistent with the above, the asserted transistors in the '643 reference do not selectively connect any circuit elements via conductors as the transistors are the only circuit elements between VDD and VSS. In short,

the cited portions of the '643 reference do not disclose, and do not appear capable of, modifying distances between power and ground pads for a particular circuit element.

The alleged correspondence to the claimed invention, and upon which all Section 102 rejections rely, is based upon what appears to be a confused interpretation of the operation of the cited reference. The fixed, constant circuit distances in the '643 reference simply do not correspond to claim limitations that are amenable to using a power network having decoupling cells for dynamically changing circuit distances in order to maintain a constant circuit length. In this context, the rejections confuse certain fixed or symmetrical circuits in the '643 reference with limitations directed to maintaining a distance between power/ground pads that is constant for each circuit element, and to limitations directed to the dynamic changing of such a distance using decoupling cells (*e.g.*, as in claims 15-17).

In view of the above, Applicant requests that the Section 102(b) rejections be removed.

In consideration of the above, Applicant believes that each of the rejections and objections has been overcome and the application is in condition for allowance. Should there be any remaining issues that could be readily addressed over the telephone, the Examiner is asked to contact the agent overseeing the application file, Peter Zawilski, of NXP Corporation at (408) 474-9063.

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